

## AUSSLIT - started

<p><b><u>Project Committee</u></b>  Elizabeth McMahon, ASAL President (Chair)  Professor Tony Williams, ARCS E/D  Ross Wilkinson, ANDS E/D nominee  Kerry Kilner, AustLit Executive Manager  Jane Hunter, UQ eResearch Lab</p> <p><b><u>Reference Group</u></b>  Dr Philip Mead, ASAL; Keith Webster, UQ Librarian; Ross Coleman, SETIS; Prof Robert Dixon, USyd; Prof Paul Eggert, ADFA; Margie Burn or Warwick Cathro, NLA; Gavan McCarthy, eScholarship Research centre; Willard McCarty, Kings College; Carl Lagoze, OAI-ORE, Sheila Anderson, Director AHDS</p>	<p style="text-align: center;"><b>Service Outcomes</b></p> <ul style="list-style-type: none"> <li>• Data integration and search services across multiple national databases relevant to Australian literature, supporting metadata and content based access as well as timeline and spatial search representations</li> <li>• Development of interest specific community knowledge bases built using shared annotation services over the linked data bases</li> <li>• Publication tools allowing researchers to create compound digital objects capturing and explaining relationships in the corpus</li> </ul>	<p><b><u>Resources</u></b></p> <p>The project will build on outputs from an AustLit ARC LIEF grant; DART, ARCHER, PILIN, RUBRIC projects</p> <p>UQ will provide a cash contribution of \$105k, service hosting and 0.5 EFT pa towards project direction</p> <p>QCiF will provide some system support</p> <p>NeAT will provide up to \$750M over three years to fund additional software and service development support</p> <p>Project size is about 4 EFT pa</p> <p><b><u>Project Manager: Roger Osborne</u></b></p>
<p><b><u>Milestones</u></b></p> <p>Year 1      Federated Search Portal for the community that supports: Searching across metadata terms as well as full-text searching across corpuses; Search, retrieval and presentation of records and documents (text, images, audio);  Empirical reporting services that support quantitative analysis of historical patterns in Australian literature and spatio-temporal visualizations for browsing AustLit collections</p> <p>Year 2      Shared annotation spaces based on secure annotation creation, editing and attachment services.  A range of annotation presentation, browse and search services and GUIs that enable users to search and browse across the content of annotations or for annotations by particular individuals (tag clouds will be provided for keywords);  RSS notification services – that notify subscribers of new annotations on particular texts or by particular individuals</p> <p>Year 3      Metadata attachment and publishing service for OAI-ORE objects – enabling their upload to a Fedora repository  Search, retrieval and presentation interface for OAI-ORE objects based on both metadata terms plus component objects.</p>		

## Marine and Climate Data Discovery and Access Project (MACDDAP) - started

<p><b><u>Project Committee</u></b>          (Chair) Professor Gary Meyers, IMOS E/D          Professor Anthony Williams, ARCS E/D          Dr Ross Wilkinson , ANDS E/D nominee          Professor Roger Proctor, eMii Director          Professor Andy Pitman, ARC NESS Convenor          Professor Nathan Bindoff, TPAC Director</p> <p><b><u>Reference Group (tbc)</u></b>          Prof Andrew Rohl, iVEC CEO; Rob Woodcock, AuScope, Dr Jon Blower University of Reading; Dr Andrew Woolf, CCLRC; Tim Pugh, OpenDAP Inc.; Kim Finney, AAD; Kate Roberts, BlueNET, Peter Oke, SIRO/CAWCR, Amanda Lynch, Monash University; Alex Sen Gupta, UNSW, Ian Suthers, IMOS</p>	<p><b><u>Service Outcomes</u></b></p> <p>General access to a wide variety of marine and climate data in a range of standard protocols, including Open Geospatial Consortium (OGC) standards, through OpeNDAP, the international standard access method</p> <p>Support Services including workflow tools that process existing data sets in order to generate standard metadata and enable the data to be accessed via the OGC services.</p> <p>Discovery Services to improve the conformity of data holdings, including a Metadata Entry Search Tool, an OpeNDAP digital library metadata harvester, a Catalogue Exchange Service and an Aggregation Service.</p>	<p><b><u>Resources</u></b></p> <p>Key members of the user community (comprising BoM, CSIRO and TPAC) will contribute 2.45 EFTs per year for three years</p> <p>IMOS community will contribute 3.2 EFT per year for three years (and \$30k for hardware)</p> <p>ARCS and ANDS will each provide 1.5 EFT per year from operational services to support the project and the required service deployments</p> <p>NeAT will provide \$1M over three years for software and service development support</p> <p>Project size is about 10 EFT pa</p> <p><b><u>Project Manager: Dr Ray Williams</u></b></p>
<p><b><u>Milestones</u></b></p> <p>Discovery Services    MEST enhancements (GEONETWORK, OPeNDAP)                                           TPAC Digital Library Portal enhancements (data registration, geospatial coordinate aware, gridftp, WCS and WMS service aware, simple visualisation)                                           Enhanced OPeNDAP harvester (geospatially aware, geospatial coordinate aware, gridftp, WCS and WMS service aware, simple visualisation)                                           Aggregation Service for remote sensing</p> <p>Access Services        OPeNDAP data delivered as WMS, WCS and trialled with AAF                                           OPeNDAP enhancements (authentication, administration, remote management, and data handler enhancements, server-side functions)</p> <p>Support Services        Translation Service (web based workflow for OPeNDAP to ISO19115 standards)                                           The enhancements of the software, community profiles, translation tools and related workflows in the proposed services will be delivered back to the international community, through their respective mechanisms or provided on Sourceforge where appropriate</p>		

## Spatial Information Services Stack (SISS) - started

<p><b><u>Project Committee</u></b>            (Chair) Scott McTaggart, CEO of Auscope            Paul Coddington, ARCS E/D nominee            Ross Wilkinson, ANDS E/D nominee            David Gray, CSIRO Minerals Down Under Flagship            Ben Searle, General Manager, Office of Spatial Data Management, Geosciences Australia</p> <p><b><u>Reference Group</u></b>            Alan Willocks , Geological Survey of Victoria            David Lemon, CSIRO Land and Water            Donald Hobern, Atlas of Living Australia            Nathan Bindoff, IMOS            Andrew Rohl, iVEC</p>	<p><b><u>Service Outcomes</u></b></p> <p>An increase in the number and variety of spatial data sets made available through common access mechanisms.</p> <p>A library of maintained common software components that can be deployed with spatial data holdings to make the holdings accessible within the spatial data commons.</p> <p>A sustained level of expertise needed to maintain and deploy those components and assist holders of spatial data to deploy and operate relevant data servers and OGC compliant services</p> <p>An OGC Catalog Service – supporting the registration of spatial data service meta-data.</p> <p>A discovery portal providing access to federated registry/catalogue services.</p>	<p><b><u>Resources</u></b></p> <p>AuScope will provide 2.2 EFT pa (5 people) as a contribution to the development team</p> <p>NeAT will fund three additional software developers hosted at iVEC</p> <p>AuScope will provide the servers for testing, development, deployment and the project management and QA infrastructure</p> <p>The user community as indicated in the milestones will resource the spatial data service deployments</p> <p>Project size is about 6 development EFT pa and an equivalent deployment effort</p> <p><b><u>Project Manager: Robert Woodcock</u></b></p>
<p><b><u>Milestones</u></b></p> <p>July 2008-Dec 2008 OGC Catalog Services and Discovery Portal, hosted by iVEC for ARCS, and CSIRO for Auscope            Auscope GPS data WFS service deployed; Geological Survey of Victoria GeoSciML testbed collaboration deployed</p> <p>Jan 2009- Dec 2009 ARCS SISS support service fully available providing deployment and user assistance            Auscope National Virtual Core Library WFS service deployed            CSIRO Minerals Down Under Flagship deploys laterite geochemical data, airborne hyperspectral data service; thermodynamic data service; Northern Yilgarn hydro-geochemistry</p> <p>Jan 2010 – Dec 2010 Auscope Virtual Rock Laboratory and Tsunami workflows utilise SISS; Auscope deploys WCS for geophysics imagery with large data set support            Report on the advantages and disadvantages of SISS approach to data access and costs benefits analysis</p> <p>Jan 2011-June 2011 Auscope Earth Model and portal service infrastructure fully established and using SISS</p>		

## ASSDA Services for e-Social-Sciences (ASeSS) – Project Committee

<p><b><u>Project Committee</u></b>            Deborah Mitchell, ASSDA (Chair of S/C)            Tony Williams, ARCS E/D            Paul Bonnington nominee of ANDS E/D            Ben Evans, ANUSF            Mark Western, UQ            Peter Nicholson, DIISR</p> <p><b><u>Project Manager: Mr Stuart Hungerford, ANUSF</u></b></p>	<p><b><u>Service Outcomes</u></b></p> <p>The foundation for an e-Social Science Virtual Organisation (SSVO) including:</p> <ul style="list-style-type: none"> <li>• Data curation software that supports reliable data ingestion, and sets up the appropriate access controls.</li> <li>• Search tools that support authenticated discovery across archives</li> <li>• Integration of a suite of analytic tools that enable easy use by social scientists (the tools themselves will be developed outside this project)</li> <li>• Integration of visualisation tools, particularly spatially oriented, and temporally oriented</li> </ul>	<p><b><u>Resources</u></b></p> <p>The immediate user community based around ASSDA will provide 6 EFT per year</p> <p>Some ARCS operational support will be provided to deploy ASeSS services at MARCS and other institutions hosting social sciences data</p> <p>NeAT will provide \$1M over three years to fund additional software and service development support</p> <p>Project size is about 10 EFT pa</p>
<p><b><u>Milestones</u></b></p> <p>Dec 2008    Demonstration versions of GIS data visualisation web tool and longitudinal data analysis web tool</p> <p>June 2009    Q/A component of curation service for unit record (UR) data; Establishment of e-Social Science Virtual Organisation web interface. Demonstration of cross-archive data search between two major archives; Historical Census and Colonial Data Archive (HCCDA)</p> <p>Dec 2009    Time Series &amp; Panel Archive, and Qualitative Data Archive available; Text based analysis tool demonstration for Qualitative Data Archive; Search available on UR data archive</p> <p>June 2010    SSVO web site upgraded to include search for Qualitative Data and HCCDA; longitudinal data analysis web service; data exchange service for Time Series &amp; Panel Data and Qualitative Data; Q/A component of curation software for Qualitative data            Production version of web-based UR archive curation service on VO web site</p> <p>Dec 2010    SSVO web site upgraded to include Time Series &amp; Panel Archive services; Q/A component of Indigenous data archive curation service; search on Electoral Database</p> <p>June 2011    Production version of web-based Qualitative data archive curation service and an Indigenous data archive curation service on VO web site. Search available over Indigenous archive; Generalised version of GIS service on UR data available on VO web site</p>		

## Data in Microscopy Imaging Neutron X-ray (Data-MINX) – Project Committee

<p><b><u>Project Committee</u></b>            Dr Allan Jones, Chair of AMMRF eResearch Committee (Chair)            Professor Anthony Williams, ARCS E/D            ANDS Executive Director, or nominee            Prof Simon Ringer, AMMRF E/D,            Prof Cameron Keppert, convenor MMSN, FF            Prof Jill Trewella, FF, tbc            Nick Hauser, ANSTO            Richard Farnsworth, Australian Synchrotron            Director of VeRSI, or nominee  <b><u>Project Manager: Dr Peter Turner (tbc)</u></b></p>	<p><b><u>Service Outcomes</u></b>            Easy and reliable transfer of experimental data from all major Australian characterisation facilities to all significant remote data storage or data repositories as determined by principle investigators.            The automated conversion of data to standard formats.            The automated capture, storage and transmission of associated metadata.            The authenticated sharing of data with colleagues as determined by principle investigators.            The means to publish data in a way that it is easily discoverable and accessible by any researcher.</p>	<p><b><u>Resources</u></b>            The immediate user community (comprising ANSTO, AS, AMMRF and MMSN) will contribute 5.5 EFTs per year for three years            VeRSI and INTERSECT will contribute an EFT each per year for three years            ARCS will provide 3 EFT per year from operational services to support the project and the required service deployments            NeAT will provide \$1.5M over three years to fund additional software and service development support            Project size is about 15 EFT pa</p>
<p><b><u>Milestones</u></b></p> <p>Year 1</p> <ul style="list-style-type: none"> <li>• Development of a design solution for the federated data repositories, metadata catalog and associated web portal, based and incorporating outputs from work done by STFC, ARCHER, VeRSI and GRANI project</li> <li>• Development of prototype AAA services based on AAF for the necessary data sharing, authorization and authentication mechanisms</li> <li>• Deployment data transfer service from ANSTO, some Australian Synchrotron beamlines, AMMRF facilities and X-ray labs to MARCS and other institutions that have appropriate storage support; and provision of functional data repositories for ANSTO and some AMMRF facilities.</li> </ul> <p>Year 2</p> <ul style="list-style-type: none"> <li>• Authentication and authorization mechanisms integrated with operational AAF and ARCS services.</li> <li>• Development of documentation and researcher training material, some researcher training programs run</li> <li>• Some data processing workflow services implemented</li> <li>• A federated data repository and prototype collaborative work environment for AMMRF facilities</li> <li>• Widening the deployment of the system to additional appropriate facilities, instruments, beamlines and data types not addressed in Year 1</li> </ul>		

## Data Integration and Annotation Service in Biodiversity (DIAS-B) – Project Committee

<p><b><u>Project Committee</u></b>          (Chair) Mr Donald Hobern, ALA Director          Professor Anthony Williams, ARCS E/D          Dr Ross Wilkinson, ANDS E/D nominee          Dr Carsten Friedrich, CSIRO ICT Centre          Professor Jane Hunter, University of Queensland          Ms Tracey Hind, CSIRO IM&amp;T eSIM</p> <p><b><u>Reference Group – to be drawn from:</u></b>          ALA Scoping Group, Australian Phenomics Network, Australian Plant Phenomics Network, ABIN, TERN, Global Biodiversity Information Facility, the Encyclopedia of Life, IdentifyLife and the Ocean Biogeographic Information System</p>	<p style="text-align: center;"><b>Service Outcomes</b></p> <p>Data Integration Services, including:</p> <ul style="list-style-type: none"> <li>Operational metadata repository for biodiversity data resources, including registration, discovery and annotation service</li> </ul> <p>Annotation Services, including:</p> <ul style="list-style-type: none"> <li>Operational annotation repository for annotations relating to biodiversity data (but potentially open for use by users in any domain), including services to create, recover and harvest annotations</li> </ul> <p>Reusable software implementations and associated expertise for use by other NCRIS capabilities, etc.</p>	<p><b><u>Resources</u></b></p> <p>The ALA will provide an EFT split between the Data Annotation Services and the project manager, as well as direct input from ALA staff</p> <p>The CSIRO ICT Centre will support the two metadata developers and CSIRO IM&amp;T will undertake activities to advance the project</p> <p>University of Queensland will supervise the Data Annotation Services developers</p> <p>NeAT will provide \$1M over three years for software and service development support</p> <p>Project size is about 4 EFT pa</p> <p><b><u>Project Manager: to be determined</u></b></p>
<p><b><u>Milestones</u></b></p> <p>Year 1      Core metadata repository implemented – basic repository available as basis for development, including basic registration of metadata          Annotation store and metadata schema repository implemented providing the basis for development of other components</p> <p>Year 2      Metadata tagging components, providing interfaces (including web services) for tagging metadata documents with ontology terms          Metadata search interface implemented.          Annotation retrieval services implemented, providing web services and user interfaces for search and retrieval of annotations</p> <p>Year 3      Data retrieval interfaces implemented providing intelligent discovery and access of structured data from resources catalogued in repository          Priority annotation user interfaces implemented and interfaces (widgets) for all priority document structures released</p>		